

## SHORTER NOTICES.

*A New Analysis of Plane Geometry Finite and Differential.*

By A. W. H. THOMPSON. Cambridge, University Press, 1914. 16 + 120 pages. Price 7 shillings.

THIS book is an exposition of a system of notation for plane metric geometry. Points are represented by Latin letters, lines by Greek letters;  $\overline{ab}$  denotes the line determined by the points  $a$  and  $b$ , and  $\alpha\beta$  denotes the point determined by the lines  $\alpha$  and  $\beta$ ;  $(ab)$ ,  $(\alpha\beta)$ , and  $(a\beta)$  denote respectively the distance between  $a$  and  $b$ , the angle between  $\alpha$  and  $\beta$  and the perpendicular distance between  $a$  and  $\beta$ . The author's problem is now one of reductional computation—to express in terms of these measures of two elements any measure of elements derived from points and lines by intersections and joins, vectorial constructions, and equational relations. This reduction is carried out not only for such measures as areas of triangles and the trigonometric functions but for differentiation and integration. The author claims that his method is superior to that of coordinate geometry in the matter of sign. There are nearly two hundred examples in the text, the majority of them being grouped at the end.

G. H. GRAVES.

*An Elementary Course in Differential Equations.* By EDWARD J. MAURUS. Ginn and Company, 1917. vi + 51 pp.

THIS is a collection of about 350 problems covering ordinary differential equations up to solution in series. Very brief explanations of the methods of formation and of solving differential equations are given, and the applications are only hinted at.

C. F. CRAIG.

*An Introduction to Statistical Methods.* By HORACE SECRIST. New York, Macmillan, 1917. xxi + 482 pp. \$2.00

As stated on the title page, this is "A text book for college students, a manual for statisticians and business executives." The book is descriptive rather than mathematical in character, making its appeal to the general reader through its discussion of methods and purposes.